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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,513	09/26/2003	Jean Steinmetz	Q77594	8638

23373 7590 05/03/2007  
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WASHINGTON, DC 20037

EXAMINER
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ZHENG, LOIS L

ART UNIT	PAPER NUMBER
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1742

MAIL DATE	DELIVERY MODE
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05/03/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/670,513

Applicant(s)

STEINMETZ ET AL.

Examiner

Lois Zheng

Art Unit

1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Status of Claims***

1. No claim amendments are made in view of applicant's response filed 6 February 2007. Therefore, claims 1-20 remains under examination.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2, 5, 8, 15 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Derule et al. US 5,683,751(Derule) in view of Emmonds et al. US 6,676,820B2(Emmonds).

The teachings of Derule in view of Emmonds are discussed in paragraph 4 of the previous Non-Final Office Action mailed 6 September 2006. The rejection for instant claims 1-2, 5, 8, 15 and 19 are maintained for the same reasons as stated in the previous Office Action.

4. Claims 1-7, 10-11, 14, 16 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carson et al. US 4,720,405(Carson) in view of Derule and further in view of Blum et al US 5,331,039(Blum).

The teachings of Carson in view of Derule and Blum are discussed in paragraph 5 of the previous Non-Final Office Action mailed 6 September 2006. The rejection for

instant claims 1-7, 10-11, 14, 16 and 18-20 are maintained for the same reasons as stated in the previous Office Action.

5. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carson in view of Derule and Blum, and further in view of Toman US 4,877,838 (Toman).

The teachings of Carson in view of Derule, Blum and Toman are discussed in paragraph 6 of the previous Non-Final Office Action mailed 6 September 2006. The rejection for instant claims 8-9 are maintained for the same reasons as stated in the previous Office Action.

6. Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carson in view of Derule and Blum, and further in view of Hughes et al. US 6,206,982 B1 (Hughes).

The teachings of Carson in view of Derule, Blum and Hughes are discussed in paragraph 7 of the previous Non-Final Office Action mailed 6 September 2006. The rejection for instant claims 12-13 are maintained for the same reasons as stated in the previous Office Action.

7. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carson in view of Derule and Blum, and further in view of Emmonds et al. US 6,676,820B2 (Emmonds).

The teachings of Carson in view of Derule, Blum and Emmonds are discussed in paragraph 8 of the previous Non-Final Office Action mailed 6 September 2006. The

rejection for instant claim 15 is maintained for the same reasons as stated in the previous Office Action.

8. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carson in view of Derule and Blum, and further in view of Melotik US 3,969,152(Melotik).

The teachings of Carson in view of Derule, Blum and Melotics are discussed in paragraph 8 of the previous Non-Final Office Action mailed 6 September 2006. The rejection for instant claim 17 is maintained for the same reasons as stated in the previous Office Action.

### ***Response to Arguments***

9. Applicant's arguments filed 6 February 2007 have been fully considered and are partially moot in view of the new grounds of rejection.

Applicant arguments that one of ordinary skill in the art would not be motivated to modify Derule based on Emmonds since Derule does not teach forming a carboxylate conversion coating and Emmonds teaches deposition of organic coating by cataphoresis which is applied to metal sheets with at least a polymer layer.

The examiner does not find applicant's argument persuasive since Emmond teaches that electrodeposited coating is more advantageous comparing to non-electrodeposited coating for its increased paint utilization, improved corrosion protection and low environmental contamination(col. 1 lines 19-26). Emmond's electrodeposition coating bath further comprises organic resin. Therefore, one of ordinary skill in the art would have found it obvious to have incorporated the electrodeposition technique as taught by Emmonds in applying the coating solution of Derule in order to benefit from

the advantages of electrodeposition as taught by Emmonds. Therefore, Emmonds teaching of electrodeposition of additional coating solution to an already coated metal surface is not relevant since the first coating as taught by Emmonds is also applied by electrodeposition(Fig. 2). In addition, the electrodeposition of Emmonds when incorporated into the coating process of Derule would create the claimed oxidation conditions.

Applicant further argues that the carboxylic acid taught by Carson is directed to the acid component of a polyester used in the coating composition and is not in free form or in the form of salt as claimed.

The examiner does not find applicant's argument persuasive and maintains that there will be some carboxylic acid in free form in the coating solution of Carson since the presence of carboxylic acid is required in order to form the polyester. In addition, the coating bath as claimed uses open transitional phrase "comprising" which does not limit the presence of the additional components such as the organic polyols as taught by Carson in the coating solution and does not exclude the polyesterification reaction as taught by Carson. It is the examiner's position that the coating solution of Carson contains the claimed carboxylic acid in free form and would, therefore, react with the metal substrate via carboxylation.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lois Zheng whose telephone number is (571) 272-1248. The examiner can normally be reached on 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ROY KING  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700